

#### ABSTRACT OF THE DISCLOSURE

A system and method for performing ranging and positioning as follows by using the procedure for packet transmission and reception between a sender and a recipient. A first radio set transmits packets to a second radio set as a recipient. The second radio set returns the packets without fail after the lapse of time (from the detection of packets) which corresponds to an integral multiple of a prescribed unit time. The first radio set counts, by using its counter, the time which has elapsed from its transmission of packets to its detection of packets from the second radio set. The remainder of the thus counted time after subtraction of the time taken by the second radio set from packet detection to packet return and the processing time of the first radio set itself is converted into the distance of propagation between the first radio set and the second radio set as a recipient.